

highly professional manner. The RBOCs actively participated in the on-site inspections, the auditors scored the sampled items in a careful and consistent manner, and the auditors remained at each central office location until the RBOCs' *own personnel* agreed that the missing items could not be found and that an exhaustive search for the sample items had been performed. The Staff then afforded the RBOCs numerous subsequent opportunities to provide persuasive evidence that the missing items had been located. Again, the Staff bent over backwards for Bell Atlantic, accepting many after-the-fact explanations and ultimately rescoring a third of the items that Bell Atlantic questioned.

Indeed, in at least three critical respects, the Staff's audit procedures were far *too* generous to Bell Atlantic and the other RBOCs. First, notwithstanding that the audit Staff remained at each central office until the RBOCs' personnel agreed that missing items could not be found, Bell Atlantic and the other RBOCs were given *four* subsequent opportunities to provide persuasive evidence that the missing equipment had been "found."

Second, when the RBOCs provided some evidence of an item's existence, but the evidence was less than fully persuasive, the Staff frequently scored the item as "unverified" rather than "not found," and thus created a large category of items for which accounting adjustments likely should have been recommended in the report, but were not.

Third, the Staff's rescoring suffered from a one-way directional bias in favor of Bell Atlantic. Although, as part of the rescoring process, the RBOCs were asked to provide explanations and documentation showing that certain items classified as "unverified" or "not found" should have been classified as "found," the RBOCs were not asked to provide documentation that would have allowed the Staff to conclude that certain items classified as

“found” or “unverified” should have been classified as “not found.” As a result, 80 percent of the Staff’s rescoring involving Bell Atlantic was in Bell Atlantic’s favor.

In short, Bell Atlantic’s arguments concerning the alleged unreasonableness and unfairness of the Staff’s audit procedures are baseless. As explained in detail in the accompanying affidavit of James K. Loebbecke, a distinguished scholar and practitioner of auditing, the staff audit procedures were well-planned, professionally executed, and fully consistent with applicable Generally Accepted Auditing Standards of the American Institute of Certified Public Accountants (“GAAS”) and the Government Auditing Standards (“GAGAS”). See Affidavit of James K. Loebbecke (“Loebbecke Aff.”) (attached hereto as Exhibit C). These conclusions reflect Mr. Loebbecke’s review of the Staff workpapers and the documents made available by Bell Atlantic. In addition, Mr. Loebbecke discussed the audit procedures and findings with the senior Staff auditors in charge of the field work, and with the Staff member who oversaw the entire process. Furthermore, under Mr. Loebbecke’s supervision and with his participation, AT&T internal auditors reviewed all items over \$1,000 classified as “unfound” in the Staff’s report for Bell Atlantic. Mr. Loebbecke and AT&T’s auditors received full cooperation from the audit Staff, who responded freely and completely to their inquiries. Loebbecke Aff. ¶ 3.

**A. The RBOCs Received Ample Notice And Time To Prepare For Their Audits.**

The Commission’s rules put Bell Atlantic on permanent notice that it is required to maintain, on an on-going basis, updated descriptions and locations of each of its in-service plant assets so that the equipment may be readily spot-checked for proof of physical existence. 47 C.F.R. § 32.2000(f)(5). Here, of course, the Commission’s Staff expressly informed Bell Atlantic that such an audit would be performed, and even provided Bell Atlantic with advance

notice of the locations that would be audited. *See Audit of the Continuing Property Records of the NYNEX Telephone Operating Companies Also Known As Bell Atlantic North As of March 31, 1999*, ¶ 18 (FCC Dec. 22, 1998) (“BA-North Rpt.”). Staff informed Bell Atlantic that it could line up any resources it deemed necessary to locate any items contained in the CPR, and expressly requested the assistance of Bell Atlantic personnel familiar with the equipment and offices to be audited. *Id.* Accordingly, by the time of the on-site inspections, Bell Atlantic should have been fully prepared to readily identify all of the selected CPR items.

**B. The On-Site Inspections Were Conducted In A Highly Professional Manner.**

Despite the cooperation of the audit Staff, Bell Atlantic elects to challenge the Staff employees’ professionalism. *See* n.2, *supra*. This attack is unfounded and irresponsible.

The auditors’ procedures were field-tested in advance of the actual field visits. When the auditors arrived at each central office location, the selected sample was presented to Bell Atlantic’s technical Staff. BA-North Rpt. ¶ 18. Consistent with the Staff’s request for assistance, three or more Bell Atlantic employees supported the Staff’s verification process at each location. *Id.* The Staff and Bell Atlantic’s personnel then jointly engaged in a search for the sample selections. *Id.* When the equipment was not found in the location specified in the CPR or when the CPR did not contain a specific equipment location, the Staff did not necessarily score the item as missing, but instead gave Bell Atlantic’s personnel an unlimited opportunity to locate the equipment elsewhere within the office. *Id.* Indeed, “[i]n the course of this process, [the Staff was] *often* taken to other locations in the office and shown items on different frames than those listed in the CPR.” *Id.* (emphasis added).

Bell Atlantic asserts that it failed to find significant amounts of equipment during the on-site inspection because “the audit Staff only allowed six hours to physically inspect each office,

or roughly ten minutes per item.” Bell Atlantic at 6. In fact, each team of auditors visiting a central office was assigned to cover only 18 sample items per day. Each item in the sample should have been readily “spot-checked” if Bell Atlantic’s CPR were maintained in compliance with the Commission’s rules. See 47 C.F.R. § 32.2000(e). Moreover, the Staff remained at each central office location until *Bell Atlantic’s own personnel* agreed that the missing items could not be found and that a complete search for the sample items had been performed. Loebbecke Aff. ¶ 7.

The results of the inspection then were scored to indicate whether equipment was found as listed in the CPR, was found in a different location or quantity than listed in the CPR, was not found after an exhaustive search by either the Staff or Bell Atlantic personnel, or could not be verified as found or not found. *Id.* The standards for classifying an item as “not found” were stringent – items were considered not found only when, after an exhaustive search by both the auditors and Bell Atlantic’s personnel, “the sampled equipment could not be located *anywhere* in the central office.” BA-North Rpt. ¶ 18 (emphasis added).

By contrast, the standards for classifying an item as “unverified” were lenient: if the auditor had some reason to believe, but was uncertain, that an item had been located, the auditor categorized the equipment as “unverified” instead of “not found.” BA-North Rpt., App. C at 1-2 (Problems Encountered In The Verification Process). The auditors thereby gave Bell Atlantic the benefit of the doubt during the physical inspection by classifying a large number of items that could not be verified with certainty as “unverified” rather than “not found.” *Id.* Overall, the auditors scored 17 percent of the sampled items as “unverifiable,” and only 8.5 percent as “not found.”

Because a significant fraction of the “unverifiable” items are likely to be missing, and should have been scored as “not found,” the tallies of “not found” items in the audit reports imply a significant underestimate of the total dollar amount of missing equipment. The auditors’ dollar estimates were based solely on the number of items actually scored as “not found”; “unverifiable” items were omitted from the calculations. BA-North Rpt. ¶¶ 22-23.

As Mr. Loebbecke explains in his attached affidavit, the on-site audit work conducted by the Staff was well-planned, supervised, and reviewed. All on-site auditors were provided with inventory forms that included space to specify whether the units of equipment were found and whether the CPR description and location were correct. In addition, the inventory forms had space for notations concerning unusual or important observations with respect to each record. Not only was the work paper documentation clear, concise, consistent, and complete, the audit supervisor reviewed the inventory forms upon completion of the on-site visit to ensure the accuracy and consistency of the findings. Accordingly, there is no reasonable basis for disparaging the reliability of the audit Staff’s work papers or the initial scorings.

**C. The Staff Gave Bell Atlantic Numerous Opportunities For Rescoring.**

Bell Atlantic received multiple further opportunities after the on-site visits to document the location of items tentatively scored as “not found.” On June 27, July 8, and October 8, 1997, the Staff provided preliminary results to Bell Atlantic, and specifically asked it to provide whatever additional explanations and documentation it wanted the Staff to consider in potentially rescoring items initially scored as “not found.” BA-North Rpt. ¶ 20 n.30. On July 20, 1998, the Staff completed its draft report, submitted its findings to Bell Atlantic, and gave it yet another opportunity to submit written responses and any other information Bell Atlantic deemed relevant. *Id.* ¶ 20. Bell Atlantic filed its response on August 19. The auditors revised their

findings based on the August 19 response, and issued a final audit report on December 23, 1998, with an invitation for Bell Atlantic to submit a final response by January 11, 1999. Order, Bell Atlantic (North) Telephone Companies Continuing Property Records Audit, FCC 99-32, ¶ 3, (rel. March 3, 1999) ("Order").

Bell Atlantic states that the explanations and documentation it provided to the Staff and the Commission fell into five principal categories: (i) items classified as missing due to the lag between the time the Staff obtained the property records and the time the Staff performed its inspection; (ii) items classified as missing because they were embedded in a larger piece of equipment; (iii) items classified as missing because they were found in a different location; (iv) items classified as missing because the property record description differed from the actual item; and, (v) items classified as missing because the property records improperly counted supplemental items as additional instances of the base item. Bell Atlantic at 5-7.<sup>8</sup> Bell Atlantic claims that these explanations and documentation were "essentially ignored" by the audit Staff, and that "the Staff did little more than shuffle around the categorizations of a few items without making any substantial changes." *Id.* at 1-2.

Again, Bell Atlantic's reckless attacks on the Staff's professionalism are unfounded. In fact, as made plain by Staff's Report the Staff gave careful consideration to *all* of Bell Atlantic's

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<sup>8</sup> [\*\*\*BEGIN PROPRIETARY\*\*\*]

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**\*\*\*END PROPRIETARY\*\*\*]** Thus, contrary to Bell Atlantic's suggestion, the Staff did not ignore Bell Atlantic's submissions; it merely found that *most* of Bell Atlantic's after-the-fact "documentation" provided an insufficient basis for rescoring certain items originally classified as "not found" after Bell Atlantic central office personnel admitted that they could not find the items.

The Staff's decision to reject some of Bell Atlantic's explanations and documentation was eminently reasonable. *First*, some of Bell Atlantic's criticisms are patently false. For

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<sup>9</sup> Bell Atlantic claims that the audit results are potentially biased because the Staff used different teams of auditors to inspect each location. Bell Atlantic, Ex. 2 at 5. **\*\*\*BEGIN PROPRIETARY\*\*\*]**

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example, Bell Atlantic claims that certain items were misclassified as missing when they were actually embedded in larger pieces of equipment. Bell Atlantic at 5. The Staff report, however, shows that such embedded items were in fact classified as “unverified,” not missing, and an accounting adjustment therefore was not recommended for such items. BA-North Rpt., Ex. C at 2. Similarly, Bell Atlantic claims that items were misclassified as missing because they were found at the central office, but at a different location than the one indicated in the property records. Bell Atlantic at 5-6. And, once again, the Staff report shows that such items were in fact classified as “unverified,” not missing. *Id.*, Ex. C at 2.

*Second*, the standard for rescoring as “found” an item that neither the FCC Staff nor Bell Atlantic personnel were able to find *should be* especially high. The auditors performed an exhaustive search for the sampled items during the on-site inspection, and thus became intimately familiar with the layout and equipment at each inspection site. By virtue of their observations, the auditors were in a unique position to judge the credibility of Bell Atlantic’s explanations and documentation. Moreover, the searches were conducted jointly with Bell Atlantic personnel, who presumably were both knowledgeable and motivated to find the requested equipment.

Bell Atlantic also ignores that, as described above: (1) the Staff’s *initial* scoring was very lenient – allowing potentially missing items to be classified as “unverified” even though Staff could not reasonably determine whether the items shown to the auditors were the actual items listed on the CPR, and classifying items as “not found” only when Bell Atlantic initially produced *no* evidence to establish the items’ alleged existence; and (2) the rescoring was biased in favor of Bell Atlantic because the Staff only requested evidence showing that certain items initially classified as “unverified” or “not found” should have been classified as “found.”



When Bell Atlantic, despite all of these advantages, was still unable to find any reasonable facsimile of the physical asset, any presumption of accuracy for the corresponding CPR entry is plainly lost. Hence, the Staff reasonably required a persuasive showing of evidence before rescoring items initially classified as "not found," and was entitled to give little credibility to the purported discovery of many of the same items, at the very same locations, weeks or months later. Indeed, it would have been entirely *unreasonable* for the Staff to rescore these items without a persuasive showing of evidence that the missing equipment actually was in service.

*Third,* [\*\*\*BEGIN PROPRIETARY\*\*\*]

[\*\*\*END

PROPRIETARY\*\*\*] Thus, far from acting unreasonably, the Staff was professionally obligated to reject such evidence when, in the Staff's professional and experienced opinion, the

evidence did not provide a persuasive basis for rescoring the items. United States General Accounting Office, Government Auditing Standards (June 1994) § 4.2(c).

**D. The Audit Procedures Complied With GAAS And GAGAS.**

Although the Commission's rules did not require it, the Staff's audit procedures fully complied with applicable GAAS and GAGAS auditing standards. *Loebbecke Aff.* ¶ 16. With respect to GAAS, the Staff's special purpose audit<sup>10</sup> is most analogous to the "agreed-upon procedures" engagements referred to in GAAS. Those rules establish that special purpose audits should be performed under both the general GAAS standards and the "first standard of field work." Codification of Statements on Auditing Standards ¶ 62.03. These standards require, among other things, that the auditors retain professional independence, that they perform their duties with professional care, and that their work be properly planned and supervised. *Id.* As discussed above, the Staff easily met all of these requirements.

The purpose of GAGAS is to provide standards "for audits of government organizations, programs, activities, and functions, and of government funds received by contractors, nonprofit organizations, and other nongovernment organizations." Government Auditing Standards § 1.1. GAGAS recognizes that government audits are highly varied and may have a combination of financial and performance audit objectives. Accordingly, GAGAS advises auditors to "follow the appropriate [GAGAS] standards . . . that are applicable to the individual objectives of the

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<sup>10</sup> The purpose of the Staff's audit was "to determine whether [the RBOC] is in compliance with the Commission's requirements regarding basic property records and continuing property records, as set forth in sections 32.2000(e) and (f) of the Commission's rules, and to determine whether [the RBOCs'] plant accounts accurately reflect the cost of assets used and useful in the provision of telecommunications services." BA-North Rpt. at 6. In light of the narrow focus of the Staff's inquiry, the Staff's audit is best described as special purpose audit, rather than a comprehensive audit of the RBOCs property accounts.

audit.” *Id.* at § 2.12. Like the GAAS standards, the GAGAS standards require, among other things, that the auditors possess adequate professional proficiency for the tasks required, retain their professional independence, and perform their duties with a professional level of care. *Id.*

Bell Atlantic does not directly address the question of whether the Staff’s procedures complied with GAAS and GAGAS. As described above, however, Bell Atlantic does contend that the Staff acted unreasonably by “essentially ignor[ing]” the post-inspection explanations and documentation submitted by Bell Atlantic. As also described above, the short answer to Bell Atlantic’s objection is that the Staff gave careful consideration to *all* of Bell Atlantic’s submissions and, in fact, rescored a significant percentage of items when the newly-submitted evidence was credible. Furthermore, GAAS and GAGAS standards, if applicable, would have *required* the Staff to reject evidence when, in the Staff’s professional and experienced opinion, the evidence did not provide a persuasive basis for rescoring the items. *Id.* at 1.2 to 1.8.

### **III. THE STATISTICAL PLAN WAS PROPERLY CARRIED OUT USING THE ACCURATE DATA COLLECTED BY THE AUDITORS.**

Unable to show that the statistical design of the study was flawed or that the audit Staff’s procedures were unreasonable, the RBOCs try to obscure the missing equipment with statistical legerdemain. The RBOCs argue variously that (1) the Staff should have used broader “confidence intervals,” (2) the Staff’s point estimate of the amount of missing equipment and the value of that equipment was biased, and (3) the Staff should have ignored all the information in its point estimates and based its inferences solely on the lower bound of its confidence intervals. According to Bell Atlantic, these statistical errors are so substantial that “there is no basis for claiming that the correct value of missing equipment is not zero.” Bell Atlantic at 12.

The Commission, however, need look no further than the RBOCs themselves: even they concede that they cannot find much of the sampled HWCOE – and thus, by definition, there is *every* reason to conclude that the value of missing equipment is not zero.<sup>11</sup> In all events, as explained below, there are no material shortcomings in the Staff's approach.

All sample estimates are subject to certain levels of error. That is, the actual mean value for an entire population may be higher or lower than the statistical point estimate of the mean. For this reason, statisticians often compute confidence intervals – *i.e.*, a range of values around the sample mean that have a specified degree of certainty (confidence level) of including the true mean value for the entire population. Two variables determine the range of a confidence interval: (1) the standard error (a measure of the accuracy of the point estimate) and (2) the confidence level desired by the auditor to ensure that the range of estimates contains the true population value.<sup>12</sup>

A “high confidence interval alone means very little.” *Reference Manual on Scientific Evidence* 376 (1994). Although increasing the confidence level increases that the likelihood that the “true” population value is within the range of estimates, it also decreases the ability of the statistician to make meaningful inferences about the population.<sup>13</sup> For example, requiring a 100

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<sup>11</sup> While Bell Atlantic (at 1) says it has found 97% of the HWCOE, it provides no support for this assertion. Even if correct, however, it constitutes an admission that Bell Atlantic's own personnel could not account for three percent of the sampled equipment.

<sup>12</sup> See, e.g., Robert V. Hogg and Allen T. Craig, *Introduction to Mathematical Statistics* 212-21 (4th ed. 1978); Alexander M. Mood, *Introduction to the Theory of Statistics* 372-400 (3rd ed. 1974).

<sup>13</sup> “It is not very impressive to be correct in a few instances with a 99% confidence interval, because by definition, such intervals are broad enough to ensure coverage 99% of the time.” *Reference Manual*, *supra*, 376, n.129 (1994) (citing Michael J. Saks & Peter David Blanck,

percent “confidence level” would allow the statistician to infer only that the true population value was somewhere between zero and infinity. Any theoretically possible value, no matter how unlikely, can be brought within the admissible range of estimates if the confidence level is set high enough.<sup>14</sup>

This statistical shell game is the foundation of Bell Atlantic’s defense. First, Bell Atlantic argues that the Staff should have used a 99% confidence level instead of a 95% level. *See, e.g.*, Bell Atlantic, Ex. 2 at 4 n.4. Although the higher confidence level would not change the point estimates derived by the Staff, it would dramatically increase the range of the confidence interval. Second, by improperly specifying a confidence interval that is symmetrical above and below the estimated mean, Bell Atlantic is even able to derive a negative lower bound number – *i.e.*, to imply that “negative” equipment may be missing. Finally, Bell Atlantic insists that the relevant statistical value is the lower bound of this extravagant confidence interval, not the point estimate of the mean: ergo, there is a possibility that no equipment was missing at all. This reasoning merits an “F” in statistics and logic alike.<sup>15</sup>

First and most fundamentally, the relevant estimate of the population mean is the point estimate, not the lower bound of the confidence interval. Bell Aff. ¶ 36. There is no doubt that equipment recorded in the CPR is missing; the question is how much. The purpose of the audit process is to answer this question by estimating the amount of the overstatement. The best

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Justice Improved: The Unrecognized Benefits of Aggregation and Sampling in the Trial of Mass Torts, 44 Stan. L. Rev. 815 (1992)).

<sup>14</sup> This is elementary statistics. *See* n.12, *supra*.

<sup>15</sup> The RBOCs also assert a technical claim regarding mathematical bias associated with the Staff’s point-estimate calculations. As explained in detail by Dr. Bell, any existing bias is negligible and may even favor the RBOCs. Bell Aff. ¶ 27.

estimate of the amount of overstatement is, by definition, the point estimate.<sup>16</sup> By choosing the point estimate, the statistician minimizes the overall risk of a large mistake in either direction.<sup>17</sup> Therefore, when a statistician must choose an estimate from within a confidence interval, the most logical choice is a number near the center, usually the point estimate.<sup>18</sup>

This fact is fatal to Bell Atlantic's claim, for the Staff's point estimates are unquestionably sound. The methods employed by the Staff to determine point estimates of the proportion and value of missing HWCOE are well known and scientifically rigorous. *See generally*, Cochran at 292 (3<sup>rd</sup> ed. 1977). Indeed, the formulas employed by the Staff to calculate the point estimates are found in leading sampling theory textbooks. *See, e.g.*, Cochran Eq. 11.25 (3<sup>rd</sup> ed. 1977). Bell Atlantic suggests the possibility of statistical bias, but concedes, as it must, that "[t]he actual bias of this appears to be negligible." Bell Atlantic, Ex. 2 at 5.<sup>19</sup> It

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<sup>16</sup> A confidence interval is a range of numbers that is, to some degree of confidence, likely to contain the true value. The one number that is the best estimate of the true value, however, is the point estimate. *See* Thomas H. Wonnacott & Ronald J. Wonnacott, *Introductory Statistics for Business and Economics* 254 (4<sup>th</sup> ed. 1990). Point estimates are designed to provide the researcher with most accurate estimate of the true value of the population. *Id.*

<sup>17</sup> Using the lower bound would increase the risk of greatly understating the actual mean value for the entire population; using the upper bound would increase the risk of overstating the actual mean.

<sup>18</sup> The basic methods of calculating confidence intervals ensure that the point estimate will be near the center of the confidence interval. *See* Wonnacott, *supra*, at 254.

<sup>19</sup> In fact, it is quite possible that any negligible statistical bias caused the point estimates to be lower than the actual amount of HWCOE missing from the central offices (which would explain why Bell Atlantic asserts that there is no actual bias). Bell Aff. ¶ 27. Moreover, the estimator used by the Staff is likely to have a substantially smaller mean squared error than an estimator with no potential bias. *See id.*

is thus unsurprising that Bell Atlantic has little to say about the methods employed by the Staff to calculate the point estimates.<sup>20</sup>

In any event, the 99% level proposed by Bell Atlantic is excessive by most professional standards. The confidence level commonly used by statisticians and auditors is the 95 percent level assumed by the audit Staff. Wonnacott, *supra*, 254. Indeed, the Commission recently adopted a confidence interval of 90 percent to evaluate compliance with its rules, on the ground that a higher confidence interval would prevent detection of rule violations.<sup>21</sup>

That is because raising the confidence level to 99 percent reduces the utility of the interval with no meaningful gain in precision. As discussed above, a 99 percent confidence level increases the range of numbers included in the confidence interval so greatly that the statistician generally cannot draw any useful conclusions from the sample. That is a steep price to pay for the insubstantial increase in accuracy. A 95% confidence level is sufficiently precise to produce

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<sup>20</sup> The Staff analyses closely follow the scientifically rigorous textbook method for calculating statistical error. *See generally*, Cochran, *supra*, Ch. 11. Indeed, even Bell Atlantic admits that, to the extent that the data collected are correct, “[t]he audit sampling plan was designed to produce a precise estimate of the proportion [of missing HWCOE].” Bell Atlantic, Ex. 2 at 3.

<sup>21</sup> Memorandum Opinion and Order, *1997 Annual Access Tariff Filings*, 13 FCC Rcd. 3815, ¶ 47 (1997); Memorandum Opinion and Order on Reconsideration, *1997 Annual Access Tariff Filings*, 13 FCC Rcd. 10597, ¶¶ 13-14 (1998). The only support offered by Ernst & Young for the 99 percent confidence interval is IRS practice in auditing for tax evasion. However, tax precedent is clearly distinguishable. An unfavorable tax audit can result in criminal prosecution; hence, conservatism in drawing statistical inferences is warranted. The issue here, however, is not whether the RBOCs should be punished, but whether their ratepayers should be made whole for the excess payments. In this context, there is no policy justification for tilting the scales against the injured parties by limiting them to a remedy derived from the lower bound of a confidence interval, when the most realistic remedy is derived from the point estimate of the mean value.

the correct result 19 times out of 20. A 99% confidence interval, in contrast, only increases the precision to 19.8 times out of 20.

Bell Atlantic does identify one error in the Staff's confidence interval calculations. As explained in Dr. Bell's affidavit, because the stratification design employed reduces the "degrees of freedom," the Staff should have used a "t-distribution" rather than a normal distribution to calculate its confidence intervals. Bell Aff. ¶ 31. As Dr. Bell explains, however, the impact of this error is relatively small, shifting the lower bound down (and the upper bound up) to widen the confidence interval by no more than six to fourteen percent. *Id.* Moreover, even this error in computing the lower bound is possibly offset by the Staff's use of a symmetric approximation to create the confidence intervals (*i.e.*, the Staff assumed the confidence interval should be symmetric around the point estimate). In fact, the sampling variance in the estimates used by the Staff grows as the proportion of missing equipment or its value grows. The error associated with low estimates is therefore less than the error associated with high estimates. *See id.* ¶ 32.<sup>22</sup>

As with the audit's design and the data collection, Bell Atlantic has not identified any significant statistical errors that remotely call into question the audit results: that the RBOCs' CPR include literally billions of dollars of investment in equipment that is not in service.

#### **IV. THE ESTIMATED \$2.9 BILLION OVERSTATEMENT OF THE RBOCs' HWCOE CPR PLAINLY WARRANTS CORRECTIVE ACTION.**

The FCC audit found all seven RBOCs in substantial non-compliance with FCC regulations regarding the CPR requirements. The Staff found that at least 15 percent (and as

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<sup>22</sup> For a complete discussion of methods concerning the methods and results of such adjustments see Efron and Tibshirani, *An Introduction to the Bootstrap* (1993).



many as 30 percent) of the items listed on the CPR were missing from their central offices. The aggregate point estimate of the missing dollar amounts for all seven RBOCs, based on the FCC's methodology, is \$2.88 billion, with a standard error of \$270 million and an approximately 95 percent confidence interval of \$2.35 billion to \$3.41 billion. *See Bell Aff., Attach. 2.* Clearly, corrective action is needed to remedy the RBOCs' massive overstatement of HWCOE in service.

**A. The RBOCs' Phantom Investment Has Large Rate Impacts.**

The hundreds of millions of dollars of missing central office equipment that Bell Atlantic has included in its CPRs almost certainly has caused a substantial inflation in Bell Atlantic's access charges. As shown below, the overstatement of equipment costs has overstated access charges in a number of ways, depending on whether the item in question was never placed in service (the most likely explanation for newer vintage equipment identified as missing), or has been retired but not removed from the CPR. *See Chairman's Letter at 8.*

First, Bell Atlantic's contention that errors in its CPRs do not imply similar errors in its Uniform Systems of Account ("USOA") is simply false. The Commission's rules require the LECs to reconcile the USOA accounts and the CPRs annually. 47 C.F.R. § 32.2000(e)(2)(iii). As Bell Atlantic concedes, the CPRs are the only source data for recording in the USOA accounts "the timing and amount of equipment that is retired." Bell Atlantic at 14. Therefore, if the LECs have improperly failed to remove from the CPRs equipment that has been retired or that was never placed in service at all, then there is necessarily a corresponding failure to remove that equipment from the USOA accounts, and those accounts are thus overstated. *See, e.g., Chairman's Letter at 4-5* ("a proper reconciliation requires investigation of differences so that corrections can be made either to the CPRs or to the books of account as appropriate. Accordingly, whatever is misstated in one is misstated in the other, and, absent a showing to the

contrary by the carriers, the auditors logically conclude that the overstatements found in the CPR are also present in the regulated books of account”).

Moreover, contrary to the LECs’ arguments, these overstatements in the USOA accounts *do* have an impact on the LECs’ revenue requirements. As the Snavelly King Report (attached to comments of MCI WorldCom) demonstrates, the kind of impact depends on whether the plant was ever in service at all, or whether the LEC merely improperly failed to record the retirement of plant that was once in service (a “delayed” retirement). Snavelly King Majoros O’Connor & Lee, Inc., Report on the Impact of Missing Plant on ILEC Revenue Requirements (Sept. 23, 1999) (attached to MCI WorldCom Comments) (“Snavelly King Report”). If the plant was never put in service at all, the result is an overstatement of both the rate base and depreciation expense. *See* Snavelly King Report at 6. If the error is a “delayed retirement,” the result is still an overstatement of depreciation expense. *Id.* at 6-10.

The burden is on the LECs, of course, to demonstrate that any of the equipment that they cannot now locate was ever in service. As the Snavelly King Report shows, the LECs’ insistence that all of the missing equipment represents a delayed retirement is utterly incredible. *Id.* at 4-4.<sup>23</sup> Missing equipment of more recent vintage in likelihood was never in service, because retiring equipment so quickly after its entry into service would be highly unusual. *Id.* at 10-11. Missing equipment that was never placed in service tends to stay on the books indefinitely because the LEC is unlikely to “retire” it, and only a comprehensive physical inventory could unearth the error. The rate impact of missing equipment that was never in service is especially

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<sup>23</sup> Because the affidavit of Dr. William E. Taylor (¶ 4) for USTA relies on the same improbable assumption, his arguments are largely irrelevant as well.

severe, since it results in an overstatement of both the rate base and depreciation expense, and the error is rarely corrected before the asset is fully depreciated. *Id.* at 4-6.

Second, even a delayed retirement causes an overstatement of depreciation expense. *Id.* at 6-7. As Snively King explains in detail, if the retirement had been recorded properly, the remaining life depreciation rate would not have changed (since the decrease in the reserve ratio would have been canceled out by the increase in the remaining life). *Id.* Indeed, Bell Atlantic's expert concedes that "posting these retirements when the plant was physically removed from service would not have changed past depreciation rates." Bell Atlantic, Ex. 5, ¶ 24 (Affidavit of Ronald E. White). Therefore, a delayed retirement results in the same depreciation rate being applied to an *overstated* gross plant. Delayed retirements therefore result in an overstated depreciation expense, and an overstated revenue requirement.

Moreover, the overstatement of depreciation expense would have affected the LECs' revenue requirement even under the Commission's pooled depreciation methodology. *Cf.* Bell Atlantic at 14-15; *see* Snively King Report at 9-10. As Bell Atlantic's expert concedes, there is no *fixed* relationship between a failure to retire plant and the revenue requirement; it may increase or decrease depending on the "direction of movement in the composite remaining life of a plant category." Bell Atlantic, Ex. 5, ¶ 6.<sup>24</sup> Specifically, if the delayed retirements are concentrated in the older vintages, the result would be an overstated gross plant and an understated remaining life, and thus an overstated revenue requirement. *See* Snively King Report at 4. But as Snively King explains, the delayed retirements *are* likely to be concentrated

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<sup>24</sup> Dr. Taylor makes the same observation (¶ 14), but nonetheless assumes that all equipment vintages are equally represented among the delayed retirement pool.

in the older vintages, because it is unusual to retire equipment within a few years of deployment.  
*Id.* at 9-10.

These overstatements of the LECs' revenue requirements have resulted in excessive rates in a number of different ways. First, the price caps were initially set at the LECs' rates as of July 1, 1990,<sup>25</sup> and therefore any missing equipment that was missing prior to that date – and it is likely that a significant percentage of the missing equipment is of older vintages – would have resulted in the initial price caps being overstated. The price caps would be overstated regardless of whether the missing equipment was never in service or simply reflects delayed retirement, because in both cases the result is an overstatement of the revenue requirement. To the extent that the initial price caps were overstated, the price caps have been at excessive levels *every year since 1990*, and indeed, those overstatements would persist to this day.<sup>26</sup>

If anything, the audit reports and the RBOCs' responses indicate that the RBOCs' CPR problems were much worse in the early 1990s than today. First, the RBOCs' audit responses are replete with instances of steps supposedly taken in recent years to improve the CPR data. These steps include wide-ranging inventories, company initiatives to rectify CPR problems, and adoption of new internal controls. BA-North Rpt ¶¶ 32, 35 & n.49; Reply to Dec. 22, 1998 Draft

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<sup>25</sup> Second Report and Order, *Policy and Rules Concerning Rates for Dominant Carriers*, 5 FCC Rcd. 6786, 6814 (1990). The rates set as of July 1, 1990, were then adjusted downward to reflect a rate of return equal to 11.25 percent.

<sup>26</sup> Bell Atlantic's assertion that the Commission made an affirmative decision to retain whatever excessive costs might have been inherent in the price cap LECs' 1990 rates when it adopted the price cap regime is nonsense. See Bell Atlantic at 16. The Commission decided merely not to delay the inception of the price cap system in order to conduct a rate investigation; it did not conclude that it would refrain from taking appropriate corrective action if excessive costs were nonetheless shown (as the audits now have). See Report and Order and second Further Notice of Proposed Rulemaking, *Policy and Rules Concerning Rates for Dominant Carriers*, 4 FCC Rcd. 2873, 3245-47 (1989).

Report of the FCC Accounting Safeguards division Audit of Nevada Bell, Pacific Bell and Southwestern Bell Tel. Co., at 30-31 (Jan. 11, 1999) ("SBC Response"). Second, the RBOCs emphasize repeatedly that their undetailed investment balances, as high as they are today, were even *higher* before the Bureau's 1994 audits. *See, e.g.*, BA-North Rpt., ¶ 35 n.49 (after the 1994 audits, NYNEX/Bell Atlantic implemented changes to its CPR system "that were intended to provide additional guidance and clarification"). Third, the audit reports and the RBOC responses indicate that the RBOCs' CPR suffered from a wide variety of other problems such as unexplained cross-connection investment, and a failure to reconcile the CPR to USOA accounts.<sup>27</sup>

These rate impacts are likely to be substantial. The Commission should therefore continue its investigation so that it can quantify the rate effects with particularity, and should take corrective action. Because substantial excessive costs are almost certainly embedded in the LECs' price cap indices, the Commission should ultimately order a prospective downward adjustment for all price cap LECs that are not signatories to the "CALLS" Plan to remove the phantom costs of missing plant.<sup>28</sup>

Another consequence of the CPR errors is that the price cap LECs would have been permitted to charge excessive rates in prior years under the sharing rules. In any given year, to

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<sup>27</sup> BA-North Rpt., App. A; SBC Response at 30-31, 33. *See also* BA-North Rpt., ¶ 11 n. 24.

<sup>28</sup> *See* Notice of Proposed Rulemaking, *Access Charge Reform*, CC Docket Nos. 96-262 et al., (rel. Sept. 15, 1999) (seeking comment on the proposal of the Coalition for Affordable Local and Long Distance Services). For the signers of the CALLS Plan, AT&T has agreed that the price cap changes proposed in the plan are "just, reasonable and fair" – and prospective changes in interstate access rates of the signatory LECs based on the results of the Continuing Property Records audits shall be "unnecessary" – if the FCC adopts in their entirety the access rates proposed in the CALLS plan. CALLS Proposal, ¶ 4.2.

the extent that equipment missing at that time was never in service, the result would have been an overstatement of the rate base and/or depreciation expense, and thus an understatement of the price cap LECs' interstate rate of return. Under the sharing rules in effect from 1991 through 1997, to the extent that the price cap LECs' interstate rates of return exceeded certain thresholds, they were required to reduce their price cap indices the following year by a percentage (either 50% or 100%) of those excessive earnings. Thus, if the LECs' interstate rates of return were understated, that would have translated directly into understated cap reductions the following year.<sup>29</sup>

The impact on the price cap LECs' sharing amounts was almost certainly substantial. As the Snively King Report shows, most of the missing equipment from the more recent vintages – *i.e.*, the period governed by the price cap regime – was probably never placed in service at all (rather than being a delayed retirement), and therefore would have resulted in an overstated rate base. Moreover, because most of the price cap LECs' earnings were in the sharing zones (or qualified for a lower formula adjustment) for most of the years from 1991 to 1995 (and some price cap LECs, such as U S WEST, continued under sharing until 1997), these overstatements in the LECs' rates of return would have had a dollar-for-dollar impact on their sharing obligations. The quantification of these past overcharges will be important if carriers choose to file complaints under Section 208 of the Act, 47 U.S.C. § 208.

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<sup>29</sup> Similarly, an understated rate of return could have permitted a LEC to take an excessive lower formula adjustment, or such an adjustment where none was warranted, if the understated rate of return fell below certain thresholds. The Commission should also initiate a review of potential understatement of the X-Factor in previous years. See First Report and Order, *Price Cap Performance Review for Local Exchange Carriers*, 10 FCC Rcd. 8961 (1995), *aff'd*, *Bell Atlantic Tel. Cos. v. FCC*, 79 F.3d 1995 (D.C. Cir. 1996); *Access Charge Reform*, 12 FCC Rcd. 16642, ¶ 177 (1997), *aff'd in relevant part*, *United States Tel. Ass'n. v. FCC*, No. 97-1469, 1999 WL 317035 (D.C. Cir. May 21, 1999).

Finally, it must not be forgotten that “[a]pproximately three-quarters of the costs at issue are subject to state jurisdiction.” Chairman’s Letter at 8. The Commission should work with the state commissions to ensure that the appropriate rate adjustments and refunds are made. Indeed, the rate impacts in the intrastate jurisdiction may be even more dramatic, for a number of state commissions adopted incentive regulation relatively recently (or not at all). In sum, CPR errors have almost certainly produced rate inflation; and the amounts at issue clearly warrant corrective action to remedy it.

**B. Accounting Corrections For Missing HWCOE**

The RBOCs should not be allowed to profit from flouting the Commission’s CPR requirements at the expense of ratepayers. Accordingly, the projected amount of missing HWCOE must be removed immediately from the RBOCs’ plant accounts. Anything less would reward the RBOCs for their massive noncompliance.

The relief must go further, however. Phantom investment in the RBOCs’ property accounts produces inflated depreciation charges, inflated returns on investment, and hence inflated rates. In cost-of-service jurisdictions, the linkage is self-evident. In jurisdictions that have adopted incentive ratemaking, the RBOCs’ inflated property accounts almost certainly have inflated the starting point for federal and state price caps, and thus have inflated (and continue to inflate) every succeeding rate since then. To make ratepayers whole, the RBOCs must disgorge their illegitimate gains. Determining the magnitude of the RBOCs’ excess earnings will

obviously require further investigation to establish more precisely the magnitude, vintage and duration of the phantom investment in the CPR.<sup>30</sup>

Bell Atlantic advances three equally unpersuasive arguments against this relief. First, it asserts that forced retirement of nonexistent HWCOE would make “it impossible to do an annual reconciliation and to balance the [general ledger and engineering ledger] as is required under Commission rules.” Bell Atlantic at 24. AT&T respectfully submits that making ratepayers whole and putting an end to overcharges should take precedence over “accrual reconciliation.” If reconciling the RBOCs’ ledgers thereafter requires simplifying assumptions or allocations, those difficulties are of the RBOCs’ own making.

The RBOCs’ second argument against purging their CPR and other property accounts is that the Commission’s regulations do not specify how to do so. *Id.* The argument is frivolous. The rules are silent on this issue for the obvious reason that the Commission never anticipated such massive and blatant disregard of the CPR requirements. The essential thing is to remove the bogus investment from the accounts. Whether this adjustment is dubbed a “retirement,” a “reversal,” or an extraordinary item does not change its economic reality.

Third, Bell Atlantic asserts that determining the extent of any past overcharges is a fruitless exercise because the Commission has no power to award refunds “here.” Bell Atlantic at 17 n.7. But there is no doubt that the Commission can award *damages* in complaint

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<sup>30</sup> It is notable that the RBOCs’ retain all of the information necessary to determine the extent of the problem. Tellingly, the RBOCs have not volunteered to supply the Commission with any evidence as to the whereabouts or status of the missing HWCOE.



proceedings, and ratepayers would be entitled to file such complaints at the conclusion of this proceeding. *See MCI Telecomms. Corp. v. FCC*, 59 F.3d 1407, 1413 (D.C. Cir. 1995).<sup>31</sup>

**C. Accounting Corrections To Resolve “Undetailed Investment”**

The RBOCs should be required to show cause why the “undetailed investment” in their property accounts should not be removed immediately. Except for particular items of equipment that the RBOCs can demonstrate are still used and useful, and thus for which they can generate a valid CPR, all should be retired forthwith and the property records should be adjusted downward.

**1. The RBOCS Offer No Plausible Explanation For Undetailed Investment Recorded Since 1968.**

The RBOCs assert that “undetailed” investment consists merely of hardwired investment on their books before the adoption of AT&T’s mechanized property record system, PICS/DCPR, beginning in the late 1960s. As MCI WorldCom demonstrates, this theory is nonsensical: up to 97 percent of the undetailed investment on the RBOCs’ books involves assets acquired *after* the implementation of PICS/DCPR. The existence of such large amounts of “undetailed” investment from vintages after the implementation of PICS/DCPR violates not only the property record plan approved by the Commission in 1968, but also the Commission’s Part 32 property record rules.

**2. Pre-1968 Hard-Wired COE Is Not Exempt From The Commission’s Property Record Rules.**

For the vintages of undetailed investment pre-dating PICS/DCPR, Bell Atlantic asserts that the Commission “exempted” this equipment from the Part 31 (and now Part 32) property record rules through correspondence with AT&T in 1967 and 1968. This claim is without merit. These property record rules had been in effect for many years before AT&T’s adoption of

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<sup>31</sup> Moreover, the two-year statute of limitations does not begin to run until the ratepayers discover the injury. *Id.* at 1416.